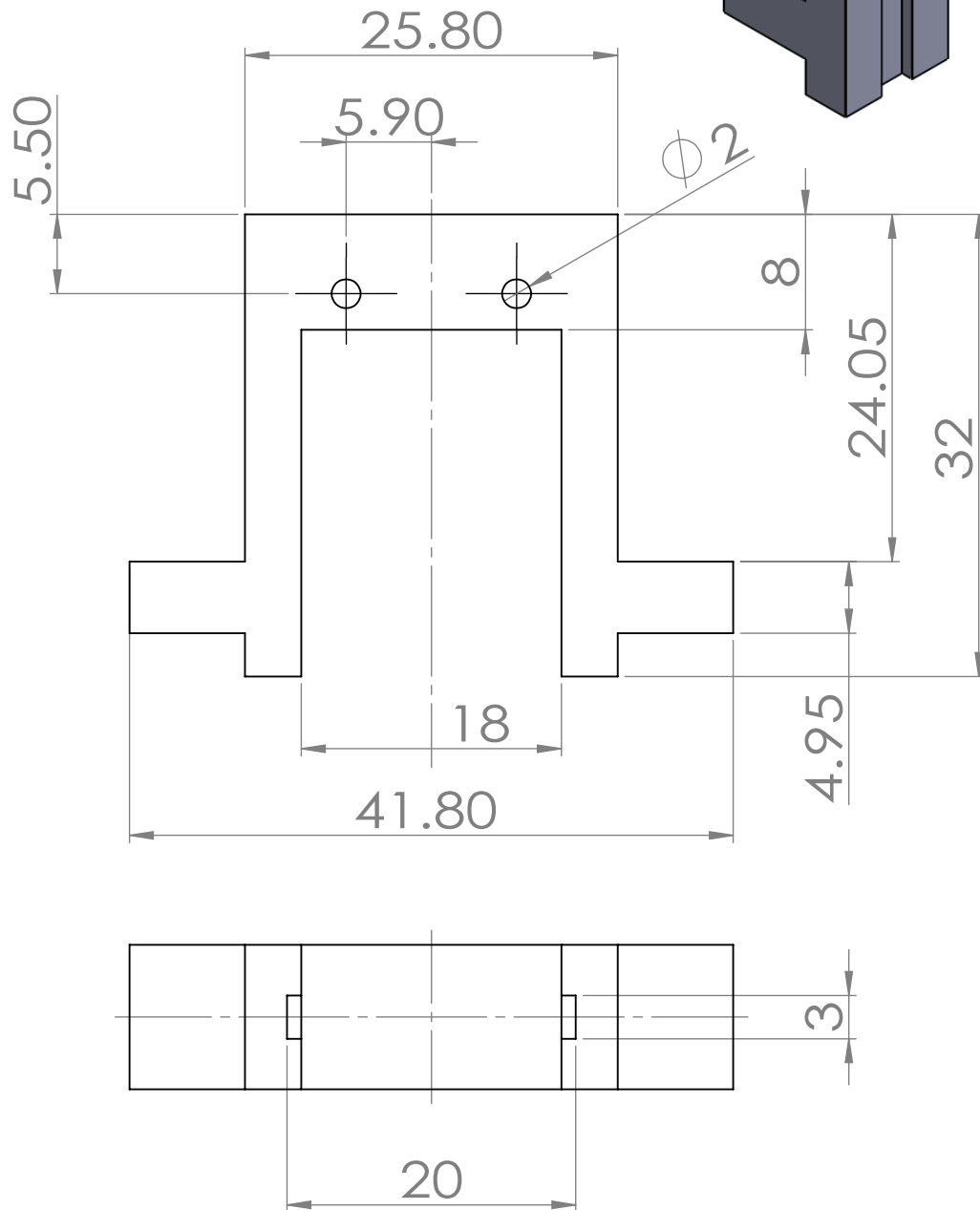
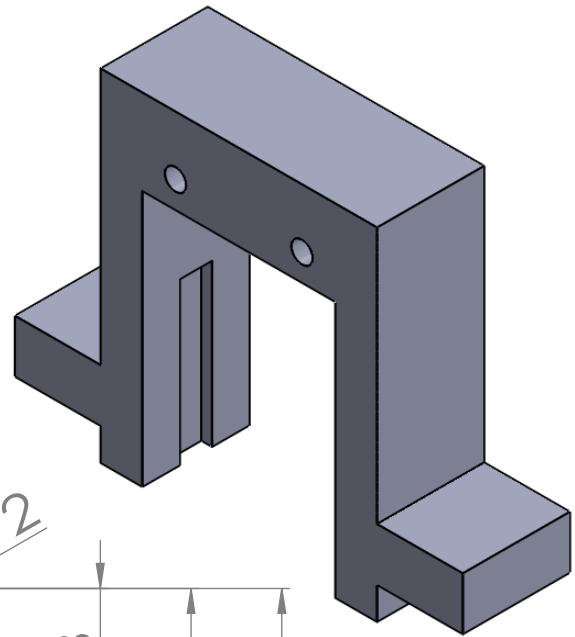
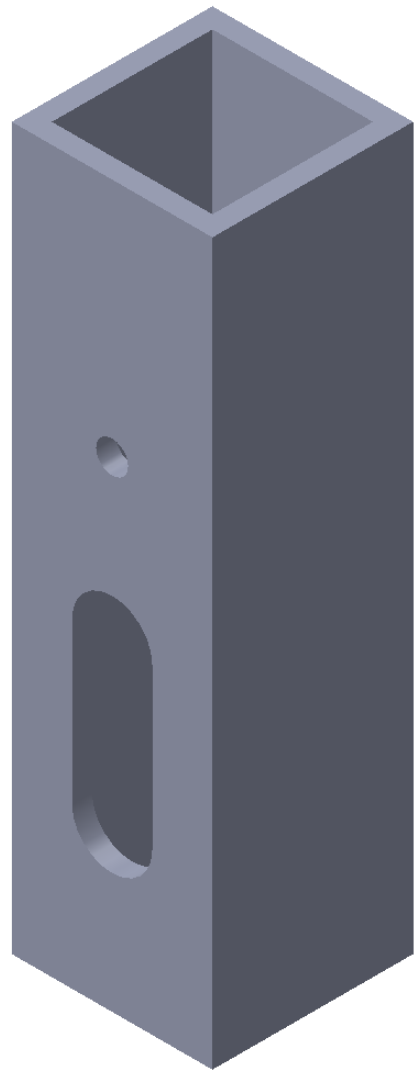
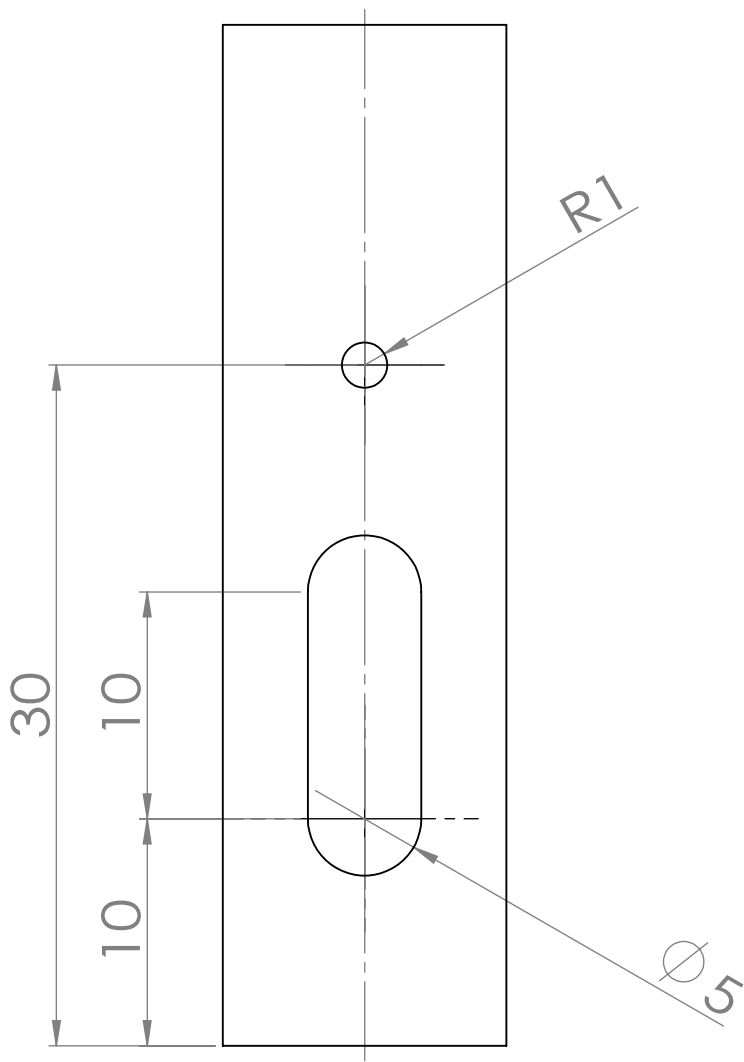


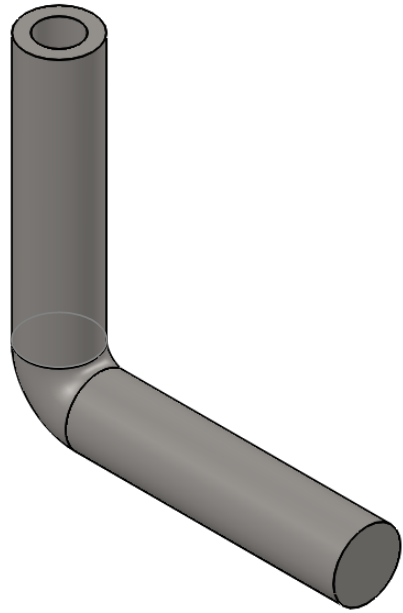
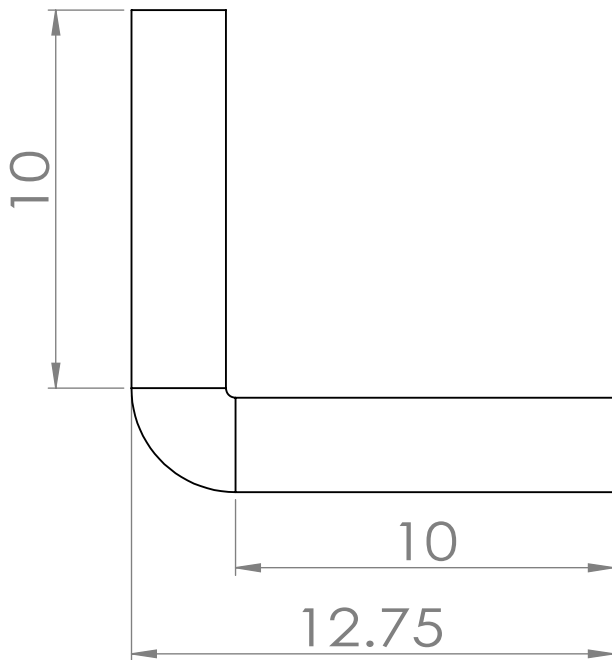
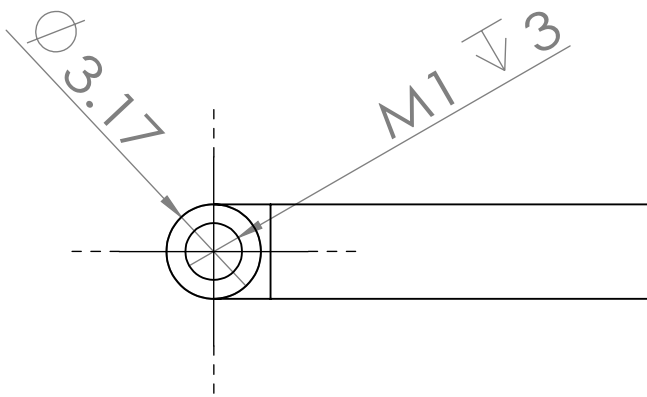
|   |  |  |  |         |  |                                   |  |                      |  |              |  |
|---|--|--|--|---------|--|-----------------------------------|--|----------------------|--|--------------|--|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  |  |  | FINISH: |  | DEBUR AND<br>BREAK SHARP<br>EDGES |  | DO NOT SCALE DRAWING |  | REVISION     |  |
| DRAWN   |  |  |  | NAME    |  | SIGNATURE                         |  | DATE                 |  | TITLE:       |  |
| CHK'D   |  |  |  |         |  |                                   |  |                      |  | Laser Holder |  |
| APPV'D  |  |  |  |         |  |                                   |  |                      |  |              |  |
| MFG   |  |  |  |         |  |                                   |  |                      |  |              |  |
| Q.A   |  |  |  |         |  |                                   |  |                      |  |              |  |
|   |  |  |  |         |  |                                   |  | MATERIAL:            |  | DWG NO.      |  |
|   |  |  |  |         |  |                                   |  | ABS Plastic          |  | 02           |  |
|   |  |  |  |         |  |                                   |  | WEIGHT:              |  | SCALE:1:2    |  |
|   |  |  |  |         |  |                                   |  |                      |  | SHEET 2 OF 5 |  |
|   |  |  |  |         |  |                                   |  |                      |  | A4           |  |



|   |  |         |           |                                   |                                     |                      |                          |          |              |
|---|--|---------|-----------|-----------------------------------|-------------------------------------|----------------------|--------------------------|----------|--------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  | FINISH: |           | DEBUR AND<br>BREAK SHARP<br>EDGES |                                     | DO NOT SCALE DRAWING |                          | REVISION |              |
|   |  |         |           |                                   |                                     |                      |                          |          |              |
| DRAWN   |  | NAME    | SIGNATURE | DATE                              | TITLE:<br><br><b>Lens Holder</b>    |                      |                          |          |              |
| CHK'D   |  |         |           |                                   |                                     |                      |                          |          |              |
| APPV'D  |  |         |           |                                   |                                     |                      |                          |          |              |
| MFG   |  |         |           |                                   |                                     |                      |                          |          |              |
| Q.A   |  |         |           |                                   | MATERIAL:<br><br><b>ABS Plastic</b> |                      | DWG NO.<br><br><b>03</b> |          | A4           |
|   |  |         |           |                                   | WEIGHT:                             |                      | SCALE:1:2                |          | SHEET 3 OF 5 |



|   |  |         |           |                                   |                  |                      |           |          |              |
|---|--|---------|-----------|-----------------------------------|------------------|----------------------|-----------|----------|--------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  | FINISH: |           | DEBUR AND<br>BREAK SHARP<br>EDGES |                  | DO NOT SCALE DRAWING |           | REVISION |              |
|   |  |         |           |                                   |                  |                      |           |          |              |
| DRAWN   |  | NAME    | SIGNATURE | DATE                              | TITLE:           |                      |           |          |              |
| CHK'D   |  |         |           |                                   | Machined Cuvette |                      |           |          |              |
| APPV'D  |  |         |           |                                   |                  |                      |           |          |              |
| MFG   |  |         |           |                                   |                  |                      |           |          |              |
| Q.A   |  |         |           |                                   | MATERIAL:        |                      | DWG NO.   |          | A4           |
|   |  |         |           |                                   |                  |                      | 04        |          |              |
|   |  |         |           |                                   | WEIGHT:          |                      | SCALE:1:2 |          | SHEET 4 OF 5 |



|   |  |         |           |                                   |           |                      |                           |          |              |  |
|---|--|---------|-----------|-----------------------------------|-----------|----------------------|---------------------------|----------|--------------|--|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS<br>SURFACE FINISH:<br>TOLERANCES:<br>LINEAR:<br>ANGULAR: |  | FINISH: |           | DEBUR AND<br>BREAK SHARP<br>EDGES |           | DO NOT SCALE DRAWING |                           | REVISION |              |  |
|   |  |         |           |                                   |           |                      |                           |          |              |  |
| DRAWN   |  | NAME    | SIGNATURE | DATE                              |           |                      | TITLE:<br><br>L Shape Rod |          |              |  |
| CHK'D   |  |         |           |                                   |           |                      |                           |          |              |  |
| APPV'D  |  |         |           |                                   |           |                      |                           |          |              |  |
| MFG   |  |         |           |                                   |           |                      |                           |          |              |  |
| Q.A   |  |         |           |                                   | MATERIAL: |                      | DWG NO.                   |          | A4           |  |
|   |  |         |           |                                   | aluminum  |                      | 05                        |          |              |  |
|   |  |         |           |                                   | WEIGHT:   |                      | SCALE:1:2                 |          | SHEET 5 OF 5 |  |

# **Assembly protocol of PIP**

- Step 1: Insert Cuvette into the square hole of the Base Track
- Step 2: Insert L Shape Adapting Rod with Spring and Fix Screw to the Cuvette from the top through the slot opening on the top of the Base Track
- Step 3: Mount and fix the Micrometer Drive at the top hole, by using screw on the side
- Step 4: Assemble Laser Diode and Iris Diaphragm into Laser Holder
- Step 5: Assemble Cylindrical Lens into Lens Holder
- Step 6: Mount tow holders together with Screw-Nuts Set
- Step 7: Slide two holders into Base Track
- Step 8: Mount the device onto the inverted microscopy object stage
- Step 9: Open the cap of Cuvette from the side, mount the Sample Tube onto the Adapting Rod.
- Step 10: Seal the cuvette with the cap and fill the refractive index matching water in using syringe
- Step 11: Turn on the laser diode, observe the sample from eye-piece. Finely tune the position of cylindrical lens till the light sheet focus on the sample.